

AMENDMENTS TO THE CLAIMS

1-21. (Canceled).

22. (Currently Amended) A magnetic random access memory structure comprising:

an insulating layer having a plurality of grooves formed therein;

a [[planarized]] barrier layer [[disposed over the insulating layer]] in each of said plurality of grooves;

[[plurality of]] longitudinally extending [[planarized]] conductive lines formed over said barrier layer in each of said plurality of grooves, said barrier layer and said conductive lines having upper surfaces;

a planarized conductive material layer formed over said upper surfaces of said barrier layer and said conductive lines;

respective first magnetic layers over said [[conductive lines]] planarized conductive material layer; and

respective second magnetic layers over said first magnetic layers[[; and a planarized conductive material layer formed between said planarized conductive lines and said barrier layer, and said first magnetic layers]].

23. (Previously Presented) The structure of claim 22 wherein said conductive material layer is selected from the group consisting of tantalum (Ta), titanium (Ti), titanium-tungsten (TiW), titanium nitride (TiN) and chromium (Cr).

24. (Previously Presented) The structure of claim 22 wherein said conductive material layer is a resistive material.

25. (Original) The structure of claim 22 wherein said insulating layer is selected from the group consisting of BPSG, SiO, SiO₂, Si₃N₄ and polyimide.

26. (Previously Presented) The structure of claim 22 wherein said conductive material layer is formed to a thickness of about 5 nm to about 20 nm.

27. (Currently Amended) The structure of claim [[22]] 24 wherein said conductive material layer is a resistive material comprising one of TaN and WSiN [[conductive lines are formed in a trench formed in said substrate]].

28. (Currently Amended) A memory device comprising:
at least one magnetic random access memory cell, said magnetic random access memory cell comprising:

an insulating layer having trenches formed therein;
a [[planarized]] barrier layer formed [[over]] in said trenches in the insulating layer;

a [[planarized]] conductor formed over the [[planarized]] barrier layer,

said barrier layer and conductor having a top surface;

a planarized conductive material layer provided over said top surface of
said barrier layer and said conductor;

a first ferromagnetic layer formed over said [[planarized]] conductor;

a second ferromagnetic layer formed over said first ferromagnetic layer;

and

a nonmagnetic layer between said first and second ferromagnetic layers[[;

and

a planarized conductive material layer provided between said planarized conductor and said planarized barrier layer, and said first ferromagnetic layer]].

29. (Previously Presented) The device of claim 28 wherein said conductive material layer is selected from the group consisting of tantalum (Ta), titanium (Ti), titanium-tungsten (TiW), titanium nitride (TiN) and chromium (Cr).

30. (Previously Presented) The device of claim 28 wherein said conductive material layer is a resistive material.

31. (Original) The device of claim 28 wherein said insulating layer is selected from the group consisting of BPSG, SiO, SiO₂, Si₃N₄ or polyimide.

32. (Previously Presented) The device of claim 28 wherein said conductive material layer is formed to a thickness of about 5 nm to about 20 nm.

33. (Currently Amended) The device of claim [[28]] 30 wherein said conductive material layer is a resistive material comprising one of TaN and WSiN [[planarized conductor is formed in a trench of a substrate]].

34-39. (Canceled).

40. (Currently Amended) The structure of claim 22, wherein respective first magnetic layers over said conductive lines are also over said [[planarized]] barrier layer.

41. (Currently Amended) The device of claim 28, wherein the first ferromagnetic layer formed over said [[planarized]] conductor also is formed over said [[planarized]] barrier layer.